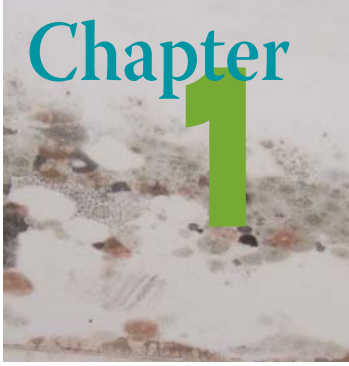


## Chapter

# 1



# *What Is Mold & Where Does It Come From?*

## *Facts & Hype*

**T**here has been a lot of recent publicity surrounding mold, or, as the media has sensationalized it, “black” or “toxic mold.” Multimillion-dollar lawsuits have brought about public awareness of the health hazards and property damage caused by mold. The fact is that mold has always been around and is a natural organism. Without certain types of mold, many of the things we enjoy and benefit from would not exist...such as penicillin, cheeses, yogurt, mushrooms, and an abundance of other things that we take for granted every day. In the wrong place and in excessive quantities, however, mold can be harmful—to homes, their contents, and their occupants.

## *Understanding How Mold Grows & Spreads*

To successfully remove mold from your home, furnishings, and other belongings, you need to first understand what you’re removing. If you need help from a professional mold remediation service, you’ll want to have a sense of what those contractors are talking about when they explain the methods and processes they plan to use to eradicate the mold.

Mold is a member of the fungi kingdom, but it has physical characteristics of organisms in both the plant and animal kingdoms. While there are thousands of species of fungi, we normally deal with about 80 different species in the world of household mold remediation.

Stachybotrys (pronounced stacky-bot-tress)—or “black mold”—has been the subject of sensational headlines in the news, but the reality is that it’s not as common in homes as many other species of fungi. The most common types of fungi collected in airborne samples in homes are Aspergillus, Penicillium, Ascospore, Basidiospore, Cladosporium, and Curvularia.

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*During remediation, proper containment measures must be taken to ensure mold spores don't spread to other parts of the house.*



It's not easy to pull a dandelion up by the roots without disturbing the seeds on top. The same is true for fungi. When you're removing mold, the objective is to do so without causing it to lose any spores. Fungi/mold is spread through the release of spores. Once the mold spores have been

disturbed, they become airborne, and if the conditions are right where they happen to land, they have a good chance of germinating and growing.

If you come across a moldy spot in your home, you'll notice that it seems to give off dust. That "dust" is actually mold spores, and by disturbing them, you're sending millions of them further into your house, HVAC system, and furniture.

Mold is known as an opportunistic type of contaminant. Its spores can travel to neighboring rooms, land there, and not grow at all. They can sit there dormant for months or even years. Then one day the right combination of temperature and humidity will activate them, allowing them to germinate and start growing. That's why, during the remediation process, proper containment is a must to prevent cross-contamination.

**Mold spores need a few things to grow:**

- **Moisture**—which can come in the form of anything from humid air, to a dripping pipe, to major flooding.
- **Food**—material it can grow on, such as wood and wood products, paper, cotton, and leather. Mold will grow on anything where there is moisture and food, such as dirt or dust. (Mold has even been known to grow on steel doors, from the condensation that collects on them. When the condensation stops, the mold will stop growing and go dormant.)
- **The right temperature**—above freezing and below 120 degrees Fahrenheit. Summer-like temperatures, between 70–90 degrees, are especially conducive to mold growth. Freezing does not kill mold spores; it just makes them go dormant until temperatures warm up again.

### Favorable conditions for mold:

- A relative **humidity of roughly 50% or higher**. Some people use hygrometers in their homes to keep track of the humidity.
- **Damp**, dusty conditions, such as piles of rags, clothing, or other mold food sources.
- **Stagnant air**, which is why overly “tight” homes designed for energy efficiency can have mold problems.

### Unfavorable conditions for mold:

- **Ventilation**—good circulation of air throughout the home, including attics, basements, crawlspaces, closets, laundry rooms, and any other area where there could be dampness.
- **Dry air indoors**—relative humidity less than 50%.

## *Does My Home Have a Dangerous Type of Mold?*

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*All visible mold, not just black mold, could present a health hazard. It should be properly removed before it grows out of control.*

This is the number one question all mold remediators are asked. While *Stachybotrys*, or “black mold,” has gotten a lot of publicity as a deadly substance, the fact is that many other molds are also toxigenic. *Aspergillus*, *Penicillium*, *Ascospore*, *Basidiospore*, *Cladosporium*, and *Curvularia* are all capable of producing mycotoxins/toxins. Some do turn black, but color alone is not an indication of toxicity.

Any type of mold can grow in large patches without producing any toxins at all. But if the mold becomes disturbed by temperature or humidity changes, that very same patch can begin to produce mycotoxins in the form of toxic spores and gases. The bottom line is that no mold growing



in a home is good mold—period. After all, how many of your friends invite you over to their home to show off their mold?

To put it bluntly, if you have visible mold growth in your home, you need to have it removed. Whether the mold is white, black, green, maroon, turquoise, gold, or brown, it is still mold, and at

some point it may produce spores or gases known to create adverse health conditions to human beings and pets.

***“There Was Mold,  
but We Bleached It  
Out. Don’t Worry!”***

If you’re considering buying a house, and the seller or builder says, “There was visible mold in the house, but we took care of the problem. We cleaned it up with bleach and painted over it,” run, don’t walk! This will not and does not work. More than likely, the mold will grow back through the paint in one to six months. The best remedy to properly correct this problem is to tear out all the contaminated drywall, remediate the areas, and replace the old drywall or other mold-contaminated materials with new ones.

*Unlike man-made hazards like asbestos and lead, mold is a growing, living contaminant that, in excess quantities, can damage not only your health, but your home and its contents. Keeping mold in check means depriving it of the conditions it likes most—moisture and food (materials to grow on).*

*Whatever variety of mold you have, if it’s visible or giving off a musty odor, it has to go. Mold cleanup or remediation must be complete, and the moisture source that caused the mold must be corrected.*